

Claims

1. A method of optimising the bandwidth usage on a Real-Time Protocol managed link transporting media from a Media Resource Function of a cellular  
5 telecommunications network to User Equipment, the method comprising:  
monitoring properties of the link; and  
as a result of said monitoring, adapting the sending rate over the link by re-packetising media, received at the Media Resource Function from third party nodes, to increase or decrease the size of packets sent over the link.  
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2. A method according to claim 1, wherein the step of monitoring the properties of the link comprises sampling the rate of packet loss on the link.
3. A method according to claim 2, wherein, when the rate of packet loss is  
15 unacceptably high, the Media Resource Function re-packetises incoming media into larger packets, thereby reducing the packet header overhead and reducing the bandwidth usage on the downlink, whilst, when the rate of packet loss is within acceptable limits, the incoming media is re-packetised to reduce the packet size, thereby reducing the transmission delay over the link.  
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4. A method according to any one of the preceding claims, wherein said step of adapting the sending rate is carried out dynamically in response to the monitored rate of packet loss.
- 25 5. A method according to any one of the preceding claims, wherein, in the event that media is to be re-packetised at the Media Resource Function, received media is stored at the Media Resource Function in a buffer until such time as sufficient media has been received to construct a packet of the necessary size.
- 30 6. A method according to any one of the preceding claims, wherein said third party nodes are peer User Equipment (UEs).

7. A Media Resource Function node for use in a cellular telecommunications network, the node handling media sent between itself and user equipment over a Real-Time Protocol managed link, the node comprising:
- means for monitoring properties of the downlink to the User Equipment; and
  - 5 means for adapting, based upon the monitored properties, the sending rate over the link by re-packetising media received from third party nodes, to increase or decrease the size of packets sent over said downlink